

Title (en)

METHOD FOR PRODUCING A MONOLITHICALLY INTEGRATED OPTICAL DEVICE, INCLUDING A SEMICONDUCTOR LASER, AND A DEVICE OBTAINED THEREBY

Publication

**EP 0159258 B1 19891227 (FR)**

Application

**EP 85400626 A 19850329**

Priority

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Abstract (en)

[origin: WO8504491A1] Process for fabricating a monolithic integrated optical device comprising a semiconductor laser and an optical waveguide and device obtained by said process. A substrate (100) is provided with a profile having at least one step (102). There are deposited on said substrate, in a single epitaxy operation carried out in vapor phase, successively a first confinement layer (106), a guiding layer (108) of transparent material for the radiation emitted by the laser, a second confinement layer (110), an active layer (112), a third confinement layer (114), a contact layer (116). The transparent material (108) has a refraction index which is higher than the indexes of the confinement layers (106, 110) which are framing it. The thicknesses of the various layers are such that the active layer (112) of the lower piling (120i) is facing the transparent layer (108) of the higher piling (120s). Application to optical telecommunications.

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

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